

REMARKS

The present application was filed on March 19, 2004, with claims 1-25. Claims 1-25 remain pending, including independent claims 1, 14, 17, 18 and 25.

Claims 1-13 and 18-25 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1, 5-9 and 14-17 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0162901 (hereinafter “Mangipudi”).

Claims 2-4, 18-20 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi in view of U.S. Patent No. 6,112,221 (hereinafter “Bender”) and U.S. Patent Application Publication No. 2003/0120705 (hereinafter “Chen”).

Claims 10-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi in view of U.S. Patent No. 6,981,029 (hereinafter “Menditto”).

Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi and Menditto in view of U.S. Patent No. 6,772,211 (hereinafter “Lu”).

Claims 21-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi, Bender, Chen and Menditto.

Claim 24 is rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi, Bender, Chen, Menditto and Lu.

With regard to the §101 rejection, Applicants have amended independent claims 1, 18 and 25 to clarify that the steps recited therein are performed by a processor.

With regard to the §102 rejection, Applicants initially note that the Federal Circuit has recently reiterated that “unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. §102.” *Net MoneyIN Inc. v. VeriSign Inc.*, 545 F.3d 1359, 1369, 88 USPQ2d 1751, 1760 (Fed. Cir. 2008).

Independent claim 1 is directed to a method of processing a request to at least one server, comprising the steps of: receiving the request; and scheduling submission of the request to the at

least one server based on: (i) a quality-of-service (QoS) class assigned to a client from which the request originated; (ii) a response target associated with the QoS class; and (iii) an estimated response time associated with the at least one server.

It is important to note that scheduling submission of the request to the at least one server, as recited in claims 1, 14 and 17, does not refer to determining which server the request is to be submitted to, but rather refers to determining when the request is submitted to the server. By way of example, in an illustrative embodiment described in the specification at, e.g., page 7, line 24, to page 8, line 1, “the scheduler typically needs to decide for each incoming request whether to admit the request immediately or to hold it back (withhold request). Moreover, the scheduler typically has to decide for requests that are held back when and in which order to admit them to the back-end server.” See also the specification at page 12, lines 8-21, with reference to FIG. 2.

In arguing that Mangipudi teaches “scheduling submission of the request to the at least one server,” the Examiner relies on Mangipudi at paragraph [0047], which states that “[a]ll client requests sent to the illustrative embodiment are routed to the server selected as the most available and/or efficient server within each class according to a selected load balancing algorithm.” Mangipudi is merely selecting which server client requests should be routed to, without determining when those requests should be submitted to the selected server. Thus, Mangipudi fails to teach the limitation of claims 1, 14 and 17 directed to scheduling submission of the request to the at least one server based on: (i) a quality-of-service (QoS) class assigned to a client from which the request originated; (ii) a response target associated with the QoS class; and (iii) an estimated response time associated with the at least one server.

Notwithstanding the foregoing traversal, however, Applicants have amended independent claims 1, 14 and 17 without prejudice solely in order to expedite allowance. More particularly, these claims have been amended to explicitly specify that scheduling submission of the request to the at least one server comprises determining when to submit the request to the at least one server. Support may be found in the specification at, for example, page 7, line 24, to page 8, line 1, and page 12, lines 8-21. Again, as noted above, Mangipudi only addresses which server a request should be routed to, not when the request should be submitted to that server.

With regard to the §103 rejection of claims 18 and 25, Applicants note that the Examiner concedes that Mangipudi fails to disclose the limitation of claim 18 directed to withholding the request when the request originated from a client assigned to a first QoS class to allow a request that originated from a client assigned to a second QoS class to meet a response target associated therewith. Rather, the Examiner argues that Bender discusses this. However, as explained at column 5 of Bender:

At step 108, once the deadline for each uncompleted job is calculated, server system 10 schedules the jobs in accordance with an earliest deadline first ("EDF") methodology. With an EDF methodology, the first job that server system 10 schedules is the job which has the earliest deadline, as found in step 106, relative to all of the other jobs. It then chooses the job with the next earliest deadline, and schedules it second, and so on until all of the jobs have been scheduled.

At decision step 110, server system 10 inquires whether each and every one of the jobs have completion times which is earlier than each job's respective deadline, as found in step 106. If any job is not able to be completed prior to its deadline, then the estimated stretch value is not feasible and is therefore adjusted at step 112. From step 112, the feasibility of the adjusted stretch value is re-checked by returning to step 106.

Thus, Bender schedules a job based on completion times and deadline times associated with *that particular job*. Bender does not withhold the request from submission to the at least one server when the request originated from a client assigned to a first QoS class to allow a request that originated from a client assigned to a second QoS class to meet a response target associated therewith. That is, Bender does not schedule jobs based on a "response target" associated with *a particular QoS class*. Chen fails to remedy this fundamental deficiency of Mangipudi and Bender.

Notwithstanding the foregoing traversal, Applicants have chosen to amend claims 18 and 25 to recite withholding (e.g., delaying) submission of requests to a server. This amendment conforms these claims to language recited in dependent claim 2. It is important to note that Bender deals exclusively with scheduling execution of jobs which either have already been submitted to the server (which Bender refers to as "on-line" scheduling) or which will be submitted at a definite future time (which Bender refers to as "off-line" scheduling). See Bender at column 3, lines 23-35. Bender does not teach or suggest any technique which involves withholding submission of requests to the server.

Chen similarly does not involve withholding submission of requests to a server. Thus, Bender and Chen fail to remedy the admitted failure of Mangipudi to reach the limitations of claims 18 and 25.

In addition, Applicants, after considering the present Office Action in its entirety, respectfully assert the same deficiency arguments presented in their previous response dated May 5, 2008 (the disclosure of which is incorporated by reference herein) with respect to Veres, Menditto and Lu.

Applicants assert that the various dependent claims are not only patentable for the reasons given above but also because one or more of said claims recite separately patentable subject matter. For example, dependent claim 2 includes limitations similar to those discussed above with reference to claims 18 and 25 and hence is believed to be similarly patentable over the cited references.

In view of the above, Applicants believe that claims 1-25 are in condition for allowance, and again respectfully request withdrawal of the various remaining rejections.

Respectfully submitted,

/William E. Lewis/

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William E. Lewis  
Attorney for Applicant(s)  
Reg. No. 39,274  
Ryan, Mason & Lewis, LLP  
90 Forest Avenue  
Locust Valley, NY 11560  
(516) 759-2946